SOLAR SYSTEM THEORIES.

Interesting Deductions of a Naval Observatory Astronomer.

Views Which Are Directly Opposed and Its Light - Dr. See's Opinions.

Will the theory recently advanced by Dr. T. J. J. See, the young astronomer formation of the solar system, supplant the hitherto accepted one of Laplace? speculation in astronomical science today. Dr. See's theory is directly opposed to Laplace's, which was accepted pated by Kant.

Laplace's assumption was, briefly stated, that the solar system originated in a vast mass of fiery mist, which, with the passage of the ages, revolved more and more rapidly until finally a ring the rings of Saturn, composed of matter which could not keep up with the tremendous revolving speed of the inner mass. This independent body, held in place near the main body of the nebula by the attraction of gravitation, assumed the form of a sphere, and began revolving on its own axis. Thus Neptune was formed. Then came Uranus and Saturn. All of the planets, according to this theory, were gaseous and flaming hot when separated from the sun; but the earth, Mars, and Venus have since cooled down to their present state. Such is the old theory, not only of the formation of our own solar system, but of all other stellar systems.

Dr. See's theory is based upon a simple and well-known fact-a gas, when compressed, generates heat. Compress the air in a bicycle pump, and the pump grows warm under the hand. The attraction of gravitation in a gaseous body of huge dimensions acts, naturally, as a compressing power-that is, a gaseous star compresses itself and produces heat. When a gaseous body shrinks, its temperature increases. So much for general principles. Dr. See's new law, specifically stated, is that the temperature of a gaseous star varies inversely as the radius, or, as he expresses it in algebraic formula, T equals K over R, T being the temperature of the body. R the radius, and K the constant. One of the most interesting phases of this principle is the deduction, by its means, of the early condition of the universe.

"We know," says Dr. See, "from the experiments of eminent physicists and astronomers, that the present heat of the sun is not far from 8,000 degrees Centigrade above the absolute cold of interstellar space. Remember that rature then would be enly her

space now occupied by the solar system. be made of the exact extent of the Ba-By the very simple application of radius of the sun was so extended that it reached the orbit of Neptune, the temperature must have been at the intense condition of cold represented by tween the temple of Autonious and Faus-273 degrees below zero Centrigrade, our sun, or the nebulous mass which then composed it, must have had a temperature of 272 degrees below zero-as cold

as liquid air, or colder. lar systems-a formless mass of icy particles floating in space. This aggregation of matter probably gave forth a faint luminescence, such as is observed in the tails of comets, a light due probably to electrical action, the exact nature of which is still involved in mystery. Imagine a great fog-bank hanging in the depths of space, but containing those forces and materials which were to form ultimately our solar system with its grand harmony and varied life. Space may today be full of just such cold, dark, nebulous masses as that which formed our sun. Indeed, the locations of some of them are known first is hydrogen, one of the lightest of known gases and one of the first to escape from the frozen state of absolute solid and non-luminous state. According to the old theories, the developing mass was a white-hot, flaming body, the like of which we now see nowhere else the old theories are erroneous. I

nebulae, made up of solid and gaseous upper cornice fitted the transversal supparticles, one of which, smaller than ports of the roof. myriads of others, is to become our solar system. Although vast and attenuated, this nebula has set up a slow motion, which is the beginning of development. 'It revolves about its centre or axis. It also condenses gradually by the attraction of gravitation. As it grows smaller and a trifle more compact, it revolves a little faster. After a few million years have clapsed, and the circumference of the mass reached what is now about the orbit of Neptune, a part of the outer edge, unable to keep up with the movement of the from a revolving buggy wheel. Thus Neptune has been started on its orbit. to revolve through the ages, living its own separate and individual life, till decay and death overtake it and it 'wanders, darkling, in the eternal space.' And so with the other planets, Uranus next, then Saturn, then Jupiter. And as the central mass gradually shrinks inward, the temperature, according to the new law, necessarily increases. Mars is formed at 249 degrees below zero Centigrade, the earth at 233 degrees, and finally Mercury at 181 degrees-all far below zero.

become suns and systems.

"Each of these worlds, on commenc-

ing a new existence, begins shrinking and generating heat. The nebula of our earth was probably about as large as the present orbit of our moon, which it east off. This earth nebuia was comparatively small and shrunk rapidly. From what is known of the length of its nebular radius, it is difficult to see how its temperature ever could have to the Generally Accepted Ones of exceeded about 1009 degrees Centi-Laplace - The Sun of the Future grade. I do not believe, therefore, that there ever was heat enough here to vaporize iron, although the temperature was sufficient to fuse lava such as now issues from our volcanoes. It was for of the Naval Observatory, as to the merly held by scientists that the interior of the earth was a flery globe filled with molten liquid substances, and that This is probably the most interesting the volcanoes were vents analogous to chimneys. It is probable, however, that the heat does not increase after a cer- ness. tain depth has been reached. Beyond by Herschel, Zoilner, Proctor, and that, it remains uniform throughout other eminent scientists, and antici- the entire interior of the globe. If the earth ever had been as hot as many of the planets are today, all of our atmosphere would have been driven off into space and this would now be an airless shrinking; slowly now, but as certainly formed on the outer edge, like one of as ever. The earthquakes are the remnants of its shrinking throes.

"The great planets, Neptune, Uranus, Saturn, and Jupiter, after being detached from the mother nebula, also went through the regular shrinking process, As they shrunk, their temperatures rose higher and higher, until finally the solid matter melted, and they became gaseous as they are today.

"The sun is still, of course, a gaseous body," continued Dr. See, "and it therefore conforms to the new law. We know that it is shrinking from year (Sir Robert Ball says at the rate of ten inches a day), and it is therefore growing hetter. At present the radiance is yellow As time goes on, and the heat increases, we may expect the light to grow gradually whiter and whiter, until it approaches the glare of an arc lamp, and after that it will gradually become blue. Then it will have reached the condition of the blue stars of our heavens, Sirius and Vega, and it will have shrunk to a density nearly approaching that of an incompressible liquid,

'There is vast room for speculation as to what effect these changes in the sun's light will have on our earth. It is known that we will receive less heat, for, although hotter, the radiating surface of the sun will be much smaller. Just what effect a glare which is blue instead of vellow will have on the earth, its foliage, and inhabitants, if, indeed, plants and animals exist at that time, can be scarcely imagined."

THE BASILICA AEMILIA

Splendid Ruins Recently Incarthed in the Roman Forum.

The workmen of the Roman Forum under the direction of Signor Boni, have lately been clearing as much of the sur when R, the radius, increases, T, the face of the Basilica Aemilia as possib temperature, must decrease in like pro- without endangering the houses which portion, Supposing, then, that the sun's stand on the top of the embankment radius was twice what it is today, the some thirty feet above. The embankment temperature would be only 4,000 de- and the houses still prevent a large, and grees. Progressing further on the probably the most important, part of the Basilica from being cleared, so much so same principle, suppose that the sun that several valuable archaeological fragthe solidity of the embankment and the silica and its original position. Pending the new law we find that, when the the generosity of some donor who will supply the £4,000 necessary to expropriate the houses, it is interesting to state the facts as they are at present known.

The Basilica Aemilia is situated be-

I degree above the absolute zero. As tina and the Curia; it faced southwest, the absolute zero, or the cold of space, running for 110 metres (about 120 yards) has been determined approximately at along the Sacred Way. The depth was 48 metres and its area about 5,000 square metres. The right side, facing the tem ple of Antoninus and Faustina, ran at right angles to the front; but the left side, parallel to the Curia, was oblique A wide row of steps in Greek marble led "Such was the original condition of from the Sacred Way up to a majestic our solar system and of all other stel- portico, seven yards wide, in the Dorice tyle. The portico consisted of sixteen arches, built entirely of marble blocks richly carved with bucrania and rosettes. The first archway to the right was con nected with the temple of Julius Caesar by a kind of arched flying buttress, which formed a triumphal archway across the Via Sacra. It seems that the great marble inscription dedicated to Lucius, adopted son of Augustus, belonged to this triumphal arch. All the fragments of the inscription are still lying where they fell when the Basilica was destroyed, and where they were found in the summer of 1899 during the excavation of the site presented to the Italian Government by Lionel Phillips.

Behind the portico and corresponding definitely, and it is a notable fact, in to each of its arches were the Tabernae support of my law, that the spectro- of which the foundation walls and some scope has so far been able to find only valuable fragments of the dividing walls two substances in these nebulae. The and pavements still exist. The pavement the so-called Alexandrina style. The dividing walls of the Tabernse served to support the wall of the great internal cold; and the other is an unknown sub- hall built of tufa blocks. Of this hall a stance which we have called nebulium. part still exists. The hall, which was All of the other substances are prob- about twenty-five yards wide, was di ably present in the nebulae, but in a vided into three maves, of which the central one measured fifteen varies be tween the columns and the two lateral ones five and a half yards each. The paves were divided by two colonnades each consisting of two rows of columns in the universe, even with our best tel- placed one above the other. The lower escopes. Either there are no more heav- row was of African marble, and supenly systems in process of formation or perted a rich and exquisitely carved cornice of Greek marble. Round the corbelieve, for my part, that the dim, cold | nice ran a sculptured frieze in high relief, beautifully wrought. On the cornice nebulae, of which we now know next rested the upper row of columns, which to nothing, will, in the course of time, were monoliths of African marble, and which, like the lower columns, supported "Picture, then, a great stratch of a richly carved marble cornice. Into the

The payement of the lateral naves was of sextile works, and that of the central nave consisted of large squares of African marble, of Porta Santa from the Island of Chios, of Giallo Antico, of green Eubecan cipolline, of pavonazzete, or Phrygian marble, and other rare stones. The same marbies were used to cover the walls

The most wonderful part of the Basillca, regarded as a work of art, was the Tribunall of which many fragments have come to light, such as basements, pliasters, and capitals. All these fregments are carved in the best style of the epoch of Augustus, and are being reproduced mass, is detached, not unlike the mud to serve as models for the various Italian schools of arts and crafts. The parts of the Basilica hitherto cleared are those Englishmen and Weishmen of a later most damaged and robbed by the vandals of the fifth and sixth centuries A. D. The parts still buried beneath the embankment, though not intact, appear from their position likely to have been much less devastated, so that their excavation would yield results still more valuable than those already obtained. Even at present an astonishing quantity of frag- stance the material has been found in ments of marble columns has been found. together with bas-reliefs, sculptures in Phrygian marble, Grecian marble, marble caudelabra, portions of porphyry statues and architectural ornaments of all kinds. -Rome correspondence of the London

NOVEL USES OF THE X-RAY Spiritualistic Seances Held by

Means of the Discovery. Certain Objects Made Luminous in

Darkness-The Credulous Deluded Into the Belief That They Are Communicating With the Spirit Land.

X-rays are now being utilized not only by surgeons and physicians, but this scientific marvel that the manifestations of spiritualistic mediums are approached, if not excelled, in weird-A French manufacturer of physical

apparatus, who has been devoting himself for some time past to experiments with the Roentgen rays in his laboratory, which is encumbered with electric lamps, lamp globes, and glass apparatus of all kinds, recently perceived world. The earth still continues its that these glass objects, under the action of the X-rays, shone in the darkness. Here was one of those interesting, perhaps useful, discoveries due to screens, have been really good only when the sensitive bodies have been in small crystals. In a pulverulent state they are nearly insensible to the such a way as to prevent any irregularity in the radiograph. Such experiments, it is said, will unquestionably be made in the near future, but at prespopular interest.

Porcelain, enamels, and dlamonds, as well as objects covered with platinocyanides (used by Roentgen) and with calcium tungstate, zinc sulphate, etc., have, like glass, the property of bein order to get up a "spirit dance" with every certainty of success, while genulne spiritual seances fail in most

iar with the terrestrial modus operanspluttering vibrations of this mecha- old. placed in a distant room. The curinto the Crookes tube by wires. This apparatus, which is not very bulky, may be placed behind a door or be con-In the experiment under considerahad eight times its present diameter, ments have to be left partially embedded is about to do justice to a tempting gives the traditional explanation of the meal. Armed with a knife and fork, he proceeds to attack his beefsteak. "At one time the sun's mass was so stability of the houses. But the recent He is not particular in regard to the First they slaughtered all the old peozinc sulphide.

The light is now put out and the Ruhmkorff coil put in action. Then comes the surprise. A plate, a glass, a water bottle, and a candle shine in space with a weird, uncanny radiance,

A sinister guest in the form of a skeleton sits opposite the place occupied by the nearsighted gentleman, who has disappeared, and whose eyeglasses ghastly apparition. Finally, to complete the illusion, hands are seen moving over the heads of the spectators, and these multiply, and then disappear, only to appear anew.

It may be remarked that, in order to make the experiment more conclusive, it is allowable for the more incredulous persons among the spectators to tie the gentleman tightly to his chair, and if they desire, to hold his hands and feet during the entire time of the experiment. It is, perhaps, scarcely necessary to explain how the latter is performed. The X-rays pass through the American Engineer in China." black cloth on the door that conceals body of the gentleman, and render luminous the glass objects covered with zinc sulphide. As for the mysterious

Scenes such as this may be varied to infinity, and the inventive spirit is so fertile that new variations are said to be made continually with even more wonderful and startling results.

BARBARISM IN EUROPE.

Cruel Practices of the Ancestors of Western Nations. In a grave of the Neolithic era, lately

pened at Flomborn, on the borders of Hesse and the Palatinate, a coating of red earth was found on one of the skulls It proved to be oxide of iron, and Prof. Virchow, who was superintending the operations, has no doubt that the face of the corpse had been painted with It; in the ourse of many centuries the flesh has cliest savages of the present day. Of ourse, they admit that the race was 'barbarous," but only in a vague, general sense; when particulars are adduced her revolt.

In the same way everybody recognizes that the Teutonic invaders of Britain worshipped idols. But few care to remember that from those invaders they themselves descend. The convenient but monstrous word "Anglo-Saxon" enables us to ignore many awkward facts. The doings of Anglo-Saxons or ancient Britons are not visibly connected with time. And there lies the practical objection to the terms-they interrupt the story of the race, causing multitudes of people to fancy that the inhabitants of this island before the Conquest differed from those after it. But in regard to the custom of painting the face or body we do not know that in any other insitu; dyed bones have been turned up often enough, but it was not suggested that the color had been applied originally to the skin. Perhaps nobody thought of that before Prof. Virchow.

But vessels containing a sediment of paint are common, and we must suppose

order that he might appear "in his habit is he lived" among the heroes gone bethat they were buried with the dead in fore upon the happy hunting grounds. Canon Taylor says, "Ruddle has been found in so many deposits of the Stone Age that we must assume the use of it was common, if not universal," Caesar tells us that the Britons stained their esh blue with wond-perhaps he meant attooing. The name of the Picts he trafitionally explained by the same practice, nd if that meaning of the word be reected no one has found a better. But acitus mentions only one tribe of Gercans who painted-if Germans they were. The Logiones, who dwelf apparently upon by conjurors. So remarkable are some the Vistnia, blackened themselves all ov of the tricks performed with the aid of | er before going on the warpath, and they unningly attacked at night, looking like ends from the pit, as they really are, says Tacitus. But it does not follow that other Germans with whom he was acuninted did not paint.

Too often ancient writers omitted detail intentionally, thinking that a large and ague style of treatment was agreeable to the fetich which they called the "Digity of History." It is not at all unlikethat when Tacitus speaks of the terrifying appearance of certain peoples he refers to their war paint.

So far as we can recall, there is no illusion to scalping in any ancient writer -that is, among the Teutonic tribes. Herodotus describes the practice of the accident, useful in this instance be- Scythlans minutely-it was just that of cause the radiographs obtained up to the red Indians of our own time. "They the present, by means of artificial make a circular cut above the ears, and with a firm grasp tear away the skin of with a bone, and when the scalp is supple use it as a napkin. A warrior who has collected enough for the purpose X-rays, and it is almost impossible to hangs them on his bridle, or even sews obtain the grain of the screen upon them together for a cloak." Herodotus the photographic plate. It is easy, mentions also that the same people on the contrary, to work the glass in flayed the right hand of an enemy to adorn their quivers with it. Authorities incline more and more to fancy that the Scythians of that era were not Mongols or Turcomans, as we used to learn at school, but Goths; they were driven back ent it is the fantastic uses to which the upon their kinsmen in Europe by the this were not a letter, but a school class, climbed trees and acted as markers. Then discovery may be put which are of advance of the Tartars. But perhaps, as has been said, there is no reference to New South Wales most famous for? And stones flung, and the dogs let loose. The scalping among Germans until we suddealy find the practice forbidden by the Visigothic code, nearly 1,000 years after Herodotus.

It is somewhat of a relief to observe that nobody accuses the Teuton, or, incoming luminous in the darkness under | deed, the Celt, with cannibalism. The the action of the X-rays. There is, earlier inhabitants of Europe are proved therefore, only the trouble of selection | guilty, but when those two races come they put old people "out of their misery," however, can scarcely be denied, and that fathers exposed or smothered their new cases, as is well known, because the born infants is proved not only by stories his winnings, and where he resides with thought they were right. Not twenty 'spirits" are unruly and disposed to but by codes of law. Both practices survived among our kinsfolk of Scandinavia The following "manifestation" will far into historic time. When the Icelandprove, it is assured, sufficiently start- ers were coerced at length into accepting ling to jar the nerves of one not famil- Christianity, and passed a law that every man should be baptized, a "clause in the act," as one may put it, stipulated that di. The Ruhmkorff coil is part of the the exposure of children and the eating

nism from destroying the effect, it is | As to the slaughter of aged relatives, in the museum at Stockholm are preserved formerly, and it is stated with all seriousness that they were taken from the sacred building when wanted for the purpose of knocking a grandfather or grandcealed under black cloth. The objects mother on the head. One asks in amazedesigned to become luminous are ment how long ago these things were Britain. There was a famine in the land. eatables down with cold water, while | length, as food was still insufficient, they a single candle affords all the light on crove out the two chiefs, Hengist and the occasion. A black curtain on the Horsa, with their followers. That was the legend, not in itself improbable. After other side of the table conceals from all this we may be prepared to admit. the spectators a skeleton covered with that Prof. Virchow has some grounds for represents paint.-Galignant.

ENGINEERING IN CHINA. Celestials Ahend of Us in Some of Our Inventions.

From what has been learned about China in recent years the conclusion lies uppermost that while Chinese engineering has proceeded quite successfully along alone have held their own before this static lines, it has rested for centuries without progress in all that involves mo tion. Thus, while their fixed structures are notable and frequently beautiful, their machines for doing work and moving curious Chinese wheelbarrow is still a most important factor in land transportation, but what in the United States, for example, is considered very modern "cage construction" for buildings, has been practiced by the Chinese for centuries, and is found all over China. This is one of the many interesting observations made by William Barclay Parsons during a railroad survey in 1898, and recorded in his recent book entitled "An

Another example of how the Chinese the Crookes tube and also through thes have, by centuries, anticipated some our modern inventions, is afforded by the system of dividing up the hull of a boat drank, one and all, "success to the trade. by bulkheads as a protection again leakage, this, with the Chinese, dati hands, those are simply gloves, covered with the same substance, and fixed to the extremity of long sticks that are moved in all directions by confederates.

Some content of the impact than the thirteenth century. The number of compartment in the Chinese trading vesses depended upon the number of owners in a vessel. John H. Morrison, in an article in "Cassier's Magazine" several years ago, told that in a large vessel there was sometimes as many large vessel there was sometimes as many large vessel there was sometimes as many as 100, each partner shipping his own goods in his own compartment, which he fitted up to suit himself, and either went in person or sent one of his family to take charge of his property.

There is thus some question whether the Chinese bulkhead or compartment system was designed for insuring safety for the vessel rather than for commercial convenience: but there is no doubt that the compartment plan existed at that early and cinchona are cultivated, and twenty ompartment Tate, and that the compartments, too were made substantial and watertight-

A BEAR AND BEER.

A Hot Springs Story Told by a Trav. eling Man.

'assier's Magazine,

"While in Hot Springs, Ark., several years ago," remarked a traveling man, "I was very much amused by the antics of canished, leaving this color, like a mask, a big black bear that was stationed up here, and several kinds of deer, which upon the bane. Many good people would in Happy Hollow. The bear was chained provide food in plenty for tigers and se not only surprised but incoment at to a tree, and was passing through all leopards. Consequently these big cats the suggestion that their forefathers kinds of motions to amuse the idlers who rarely attack cattle, and will not look at storned themselves with paint, like the had gathered about the place, waltzing one minute and doing an awkward polka the next, and it all seemed to greatly delight the spectators. The owner finally asked the bear if he would not like to have a glass of beer. Apparently the bear understood the offer, and was almost ful-samely public in evidencing an accordance somely polite in evidencing an acceptance. The bear was brought a good, cold pint bottle. Then there was more waltzing, more dancing of all kinds, and the beer seemed to quicken and accelerate the sear's movements. One of the spectators set up the beer for the bear. The bear continued to dance, but occasionally would show signs of expecting some other cilow to come to the front with a bottle of eer. The spectators kept buying beer for beer. The spectators kept buying beer for the beast just to see how much it would take to be obtained the animal. The owner apparently did not care how much beer the bear drank. The spectators got to drinking, too. Every time the bear would drink they would drink, and they would say their little toast to the pet. The bear would drink with every fellow who made the offer. The bear had no fa-vorites, and the contents of a bottle would corites, and the contents of a bottle wo be guilted down almost in a tiffy. This thing kept up all during the afternoon, and I saw several groups of men go swaggering away from the place with about all they could carry conveniently. When the last group staggered noisily away the hear was still sober and apparently anxious for newcomers wh might want to try to drink a bear un-der the table, as the saying goes among the rounders."—New Orleans Times Dem-

Love of Sports a Characteristic of the Australian.

Boating the Favorite Pastime-Cricket Week a Great Occasion in the New South Wales Capita !-Some of the Picasure Resorts.

Visitors from older countries invariably become impressed with the genial character of Australian social life, and the general brightness of its surroundings. This is especially observable in the outdoor life of Sydney. There is nothing to differentiate George Street, Sydney, from most of the principal thoroughfares of any of the leading British cities, save the brighter aspect of the buildings and the warm

which is also full of omnibuses, coaches, private carriages, cabs, and other light vehicles. The pavement is alive with pedestrians and the shop windows display the latest fashions in jewelry and dress, the newest books and engravings, the freshest designs in furniture and ironmongery, and the most recent novelty in patent medicines or cosmetics. Perhaps They had with them their hunting dogs, the one point of dissimilarity between an Australian and an English, or, indeed, any of pluck and cunning. The tiger had kill-European or American city, is the absence of that extreme poverty and squal- | dragged it into a small wood on the opthe head. Then they scrape off the flesh or which cast such a dark and ominous shadow upon the chief centres of population of the Old World. Not that poverty night fires had been kept alight; tomand squalor are unknown in the new land; but penury and wretchedness do not obtrude themselves upon one's notice, and female relatives. The nets resembled it is tolerably certain that in ninety cases | large meshed sheep nets; they were fastout of a hundred they are the result of | ened lightly about six feet high, and hung misconduct, and not of misfortune.

Love of out-door sports is a marked characteristic of the Australian. An American visitor to New South Wales, writing to a Californian paper, said: "If we would ask the boys, 'What sport is the others shouted, guns were fired off, if Australians, they would answer to a din was terrific, but suddenly above it boy, 'Boating,' and this is true, at pres- all came the unmistakable roar of a tiger. a pitiful business! So I went to see how ent in the shape of a great sturdy black- The excitement was intense. The shrill smith. New South Wales holds the voices of the markers in the trees could Austria, Italy, Japan, and Russia were champion oarsman of the world; physi- be distinctly heard. "The tiger is going to "save their face" by executing the cally he is the ideal of Longfellow's up the hill; he is running to the right; only two men they could lay hands on 'Blacksmith,' his muscles undoubtedly he has turned back; he is going to rush being 'strong as iron bands;' but suc- through at the north end. Look out, he cess has not spoiled him, for after re- is very angry." I had been posted at the into view they have lost the habit. That | tiring upon his laurels, instead of taking a public house, as do most retired champions, he devoted himself to the for the beast to break cover, but they management of a farm purchased with his wife and family.

other ambition, that of being a cricketer. chins working hard with but and ball, have thought of fighting wild beasts at of Pekin to the place of execution. The apparatus used, but to prevent the of horseflesh should be optional, "as of and here and there, where the 'team' is Ephesus, or something else, less ragged and the playground is a field I thought of nothing. I was drunk, the responsibility of the prisoners while instead of a common, a brave calico flag mad drunk with excitement. I besought flutters in the breeze. No reporter has the royal beast to charge; I shouted wild rent that produces the X-rays is led certain ancient clubs, kept in churches as yet put their scores into print, but challenges at him. I was consumed with the vegetable market-a narrow and dinthe years flit very quietly by, and then a burning desire to drive my spear home. the field and the calico flags are things After that he mi ht chaw me up for all of the past, and we hear that John I cared. It was not to be; he turned Smith's bowling was superb, and crowds short five yards from the net. Ten minof well-dressed women will applaud him. utes later I saw him rush out higher up placed as near to the tube as possible. stored in the churches-and there is no ney. Nothing is spoken of but the scores, for all the world like a gigantic rabbit. categorical reply, it seems. But when and day after day crowds turn in at the A dozen spears were in him at the intion a diner (who may be supposed to the leading archaeologists of the North wide gates of the Sydney Association stant. He had no chance whatever. It be nearsighted, since he wears glasses) agree their statements must be accepted, ground. In another letter the same writhowever extraordinary. Adam of Bremen er observed that Sydney is the hotbed of rush; the fatalities chiefly occur when picnies, most of the holidays being spent | the tiger sulks, and a man well primed "All along the harbor there with drink are public picnicking grounds, with pavil- him up. This drunkenness is the reason ions and swings. Their names are legion, why few Europeans hear of tiger netimmense that it covered the entire work has enabled accurate calculation to liquid portion of the meal, washing the ple, then most of the children, and at every available spot being taken up; ting, and why one is never allowed to some, indeed, especially Athol Gardens, stand in the likeliest spot. The farmers being scarcely available A picnic there fear a drunken spear thrust, so easily must keep the picknickers upon the ten- given in the excitement of the moment. terhooks of suspense at luncheon, lest However, I was fortunate, and those five cloth and food and glass should go glid- seconds when I thought the tiger would ing into the water, so very upright is the charge will remain with me all my life supposing that the red clay upon a skull incline. And then there is Clontarf, a thrilling memory.-The London Globe. which is a natural lawn surrounded by a shrubbery and fringed with a mimic beach, shells and all, on which tiny mock waves ripple and sing.

Manly Beach is also a favorite spot; and then there are Sans Souci, Pearl Bay, its destination on holidays painted on canvas strips in "larger than life" capitals, so that verily "he who runs may read." Then again there are many bays where, grounds, the quieter-minded people like to go and take their baskets. They are tempted by their comparative solitude and people and goods are rudely primitive. The by their wild, fresh beauty, and it is indoors in a city to sit all day beside the train of her up-to-date gown back through sea and feel upon their faces the cool spray from the mad waves which rush and break upon the rocks, "as though the Lord had just released the last world from his hand." Then, lost the holiday spirit should flag, there are special picnics, such as the bakers' picnic, the drapers' picnic, the butchers' picnic, etc., even down to the undertakers' picnic, of which ghouls' feast there is no record kept as to whether the tables be coffins and the utensils bones, though on the bccasion of their first jovial picnic they

NETTING A TIGER.

One of the Rarest Forms of Big Game Bunting.

I am among the few fortunate Englishmen who have participated in the rarest plan existed at that early and cinchona are cultivated, and twenty brief but notorious prominence in the city of London, owing to the discovery of gold. Companies were hastily formed and heavily capitalized, but the mines never gave any promise of paying dividends even on reasonable and ital, owing to refractory ore. The Wynand is, however, a paradise for sportsmen. Elephants and bison roam wild a tethered calf or kid. The hunting of them is very difficult, for cover abounds. By lucky chance a man may stumble on one when he has his rifle with him and thus get a shot, otherwise he may spend months, and even years, without catching a glimpse of them, although oft on a stilly night he will hear their loud purr his rage. In Rhode Island, in 1854, his keeper, be

The natives of the Wynaad are good sportsmen, and they have experienced squal difficulty in bagging the lordly deer slayer. Nor is the desire to secure a tiger skin soicly a matter of sport with them. Now and again "stripes" turns cattle lifter, and before he is destroyed or his taste for beef glutted he will decimate a herd. It can, therefore, be understood that among Wynaad cultivators there is an toward the fox. With peculiar audacity they devise a simple system of netting which in favorable circumstances is almost invariably successful. To understand the system, one must realize the lay of the land. The hills are mostly grass, but in their folds are thick woods, from half an acre to five acres in extent. Be-

tween the hills are swamps which are under rice cultivation. If a tiger be marked down in one of the smaller woods when the grass on the hills is short it is

quite a simple job to run a net around the wood and await results. On a lovely morning in the early au

tumn news was brought to me that a iger had been encompassed. Short time did I spend in covering the few intervening miles. The Wynsad at that time of the year is singularly beautiful. The air is soft and balmy; larged winged butter flies flutter ahead of you; flocks of par rots fly screeching above, and innumer able pleasant sounds and scents rise from the surrounding jungle. Arrived at the scene of action, I found a large gathering of the leading farmers and their laborers, armed with spears, guns, staves and bows and arrows. The farmers are fair skinned men, with rather a Jewish cast of countenance. They are evidently immigrants to this upland in comparatively recent times. The laborers are a low type, very black, many with curiy Electric trams run along the highway, hair, thick lips and a distinctly negro look. They are supposed to be the aboriginals of the country and of the ancient Dravidian stock. As a rule, these agrestic slaves are downcast and humble in mien but on this occasion, thanks to an ample supply of Dutch courage in the form of strong sago palm arrack, they were bold and swaggering, not to say truculent, a yellow sort of lurcher, well fed and full ed a cow the preceding afternoon and posite hillside. Within three hours nets had been run round the wood, and all toms freely thumped, accompanied by profuse swearing at the tiger and all his so that they would bag easily when the animal rushed. I was given a spear, and the sport be-

gan. One or two of the more adventurous were sent within the wood where they end of an open glade; two of the farmers were with me. It seemed an unlikely spot did not agree with me. For a moment I yards off and coming straight toward me "Every lad pants to be a champion was an infuriated tiger, two dogs having puller, and takes to the water as natu- at his flank. Between me and him was a rally as does an eel. Then there is an- nimsy sheepnet, nothing more; the only weapon I had a rusty spear. I suppose all On Saturday afternoons all the stray bits the sins of my life should have crowded of common are alive with ragged ur- into my brain at that moment, or I should

A cricket week is a great week in Syd- the hill and roll over and over in the net into the wood to stir

STORIES ABOUT DOORS.

Those of the Revolving Type Bring Confusion to Firemen.

There was a false fire slarm in the and Long Pay. Every steamer hangs out Plankington House some weeks ago, and in their haste to be first on the scene of actica the men of the chemical company rushed into the hall through the revolving door. When the next section "revolved" though they have no regular picnicking they were caught, and there was language used that was shocking before the hose was released.

The other day a tall, handsomely dressed woman was coming out of Hannifin's, something for people who are a great deal and a North wind managed to blow the the doorway just as the door closed tight. She stood there pinioned. It was several seconds before she was noticed. A pertly man emerging from the door of the Gold-smith Building offices did his best to release her from the outside—she was grow-ing more impatient every moment. Final-ly he went inside, through the other door, and succeeded in freeing her. She exclaimed: "Well, you're slow!" He says he doesn't know whether she was a woman or a "lady clerk".

was a woman or a "lady clerk."

The doors which show the greatest indications of push are at the Pabst Building entrance. They have one peculiarity; they are left-handed doors. Now, in the United States, one usually expects to find the right-hand door of the two in the yielding condition. Therefore it is armustical to see heavy vigorously some people. yielding condition. Interiors it is amis-ing to see how vigorously some people jum their avoirdupois against the bolted and clamped right door of this entrance, and swear they didn't know Captain Pabst was left-handed.

There is an old man who has been a de-

positor in the First National Bank for the past twenty-five years or more, who doesn't like the rotary door in that building. The other day he was coming de corously out, when behind him came som nervous young hustler who gave the doo that this sport takes place. This is the Wynnad, an elevated plateau, broken up into countless hills. Here coffee, tea, and cinchona are cultivated, and twenty years ago the district came into the district Answer: He comes to adore, he gives the bell a ring; he gives the maid his name, and if he doesn't find her out he is

taken in.-Milwaukee Scutinel. A VICIOUS ELEPHANT

Hannibal Caused Seven Deaths During His Career.

Hannibal was one of the largest ele hants that ever traveled through Ameria, and he was noted for his viciousnes and ferocity. He was brought to this the street was quickly resumed; nor was country in 1824 by Mr. Van Amburgh, and | there anything to indicate that what must at that time was supposed to be very old, but it was claimed that he grew considerably after his arrival here, so some show men thought that the estimates of his age were probably incorrect. He killed two spots on the street, facing a very several people on different occasions; it was said that at least seven fell victims to dust had been converted into dark colored

as they come up from dranking at a stream where, in the morning, their pugs fore starting out in the morning, made him lift the hind part of a wagon loaded with nearly two tons, for the purpose of getting it into line with the other vehicles.

It is supposed that this action, though
not unusual may have suggested to him
the line of attack which he adopted afregards. When about seven miles from Pawtucket, on the road to Pall River, he suddenly became furious and turned upon his keeper, who fled for his life and took refuge in a house. The beast freed himself from his fetters and rushed along the road for ripe miles, destroying everything road for nine miles, destroying everything that came in his way. His keeper follow-ed him and finally captured the enraged animal and took him safely back to the inbred animosity against tigers very simi-lar to the feeling of the British farmer that showed that Hannibal had kindly in stincts. While he was in Vermont many Hannibal immediately took him upon his tusks and held him there until the arrival of the rest of the troupe. A little touch was added to the story by relating that the keeper's faithful dog, while his master was held in the elephant's tusks, licked the face of the unconscious man until he revived.-Boston Transcript.

BEHEADING THE BOXERS.

Quick Execution of Two Noted Chinese Anti-Foreign Leaders.

Vivid Description of the Methods Used to Carry Out Demands of the Powers - A Ghastly Exhibition Which Lasted But Three Minutes.

Just before Yuen Chang, a member of the Tsung-li-Yamen, was beheaded here in July on account of his alleged pro-foreign leanings, he solemnly warned Shiu Cheng Yi, the Vice President of the Board of Punishments, in the following language: "Today I shall suffer an ignominious death because I have striven to avert calamity from China. In a few months the foreigner will occupy Pekin, and then you will undergo a similar penalty on the selfsame spot."

This forecast was realized today, and as the Chinaman is supergitifous and a fatalist, perhaps the feeling that it was his destiny may have afforded some sort of consolation to the wretched Shiu Cheng Yi when he and his colleague, Chi Shiu, were being joited in Pekin carts through this dusty city to their death.

Save for the skill of the Japanese we should not even have secured anyone for beheadal. The sad part of it is that the allied forces have made it clear to the Chinese that the Governments of the "foreign devil" collectively are prone to adopt the same pitiful diplomacy of "bluff and cave in" which over and over again has characterized their individual policy in treating with China. Yes; these two comparatively unimportant men, who "never will be missed" by the Chinese, have been considered by the allied Powers as suffiing to save our face, while their eleven superiors in crime and position are allowed some of them to submit to a nominal banishment and the rest to commit a hypothetical suicide.

The worst that can happen to those men is that they should really kill themselves, in which doubtful case, in the eyes of the Chinese, they will be martyrs and not degraded criminals. Truly, England, -France, Germany, America, out of the thirteen on the famous list.

In taking leave of their kindly custodian, Colonel Shiba, of legation siege fame, the doomed men had said: "We cannot understand the Emperor's edict; but if our beheadal will tend toward the restoration of an honorable peace to China we are happy to die, even in this degrading manner.'

Then they were handed over to the Chinese authorities, and after saying good-bye to their immediate relatives, took their places in the centre of the quiet procession that passed at a walking pace through the thickly populated streets hinese soldiers were afraid to assume passing through the streets, and so the Japanese were told off to escort them to gy street in the Chinese city, where executions habitually take place. Arrived at their destination, the carts halted in front of a roughly constructed tent of acking stretched across bamboo poles, where sat the magistrate who was to read over to them the history of their misdeeds and formally confirm the death sentence.

Hard by were a couple of mats on the ground, and by them sat the executioner's assistants-villainous and dirty-locking en with unwashed clothes that were impregnated with the dried blood of previous victims. One of them stood up, shouldering the heavy sheathed knife that was to do the deed, in an attitude resembling a slipshod "attention," and another held under his arm the metal bowl that was to receive the heads. They chatted with each other and with the crowd, and the knife-bearer would unsheath his weapon for the benefit of the kodak fiend, who was present in a great variety. The narrow street and the roofs of the adjoining buildings were thronged with men, nostly foreigners. Farther off, held at bay by the foreign guards, was an im-

mense crowd of Chinese. Every variety of uniform was noticeable, and the few civilians present were nearly all press men. The executioner-inchief, who stood aloof from his companons, was by no means so repulsive looking a man as one might expect; he seemed' alert and intelligent, and was neatly iressed in crimson trousers. American and French soldiers acted as police.

Chi Shiu, an elderly man of full body, and a member of the Tsung-li-Yamen, was in the first cart. After the legal formalities had been gone through with incredible rapidity, he walked firmly and with dignity to the farther mat and knelt down. Instantly he was seized, a piece of string was tied tightly round his head, his pigtail pulled aside, his clothes torn tway to bare the neck, and his arms seized. Four men held him while the executioner raised the heavy knife, and, with one swift drawing cut, decapitated his

victim. The head was held aloft for all the world to see, and simultaneously the inert trunk fell forward to the ground. There it lay while the executioners, with hands and clothes saturated with blood, went in search of the second prisoner. Shiu Cheng Yi, whose chief offence

seems to have been that his father, now lead, declared that he would never be happy until he had the skin of a foreignr as a rug for his cart, was also an elderly man, and was taller and not so tout as his predecessor. It was obvious that he had been robbed of all feeling by drugs. Inere was no emotion in his face as he was dragged along and placed in position on his mat. It was all over in a ew seconds, and I do not think that three minutes elapsed between the securng of the first prisoner and the fall of the second head. Though rapidly carried out, and possibly an almost painless death, a Chinese execution is a ghastly and uncleanly exhibition.

'Soon, however, the orderly crowd melt d away, save for those who had curiosity enough to wait and witness the g.veome operation of sewing the heads on o the trunks and the disposal of the bodies in the elaborate coffins. The shops oon opened and the normal business of eventually become a historical and is ertainly the most internationally atended legal tragedy of modern times had just been enacted here, except that at ordinary grocery shop, the thickly lying patches of sticky mud.

Altogether, I counted the people of hirteen different nationalities in the rowd which witnessed the execution, and the only pleasing feature throughout the ghastly business was that, though a public ceremony, there was no sign of rowdyism. The ribald song the laughter, the oaths, and the hysterical shricking which characterize a French execution were not there, nor was there any sug-

gestion of prayers for the dead Let us hope, with these unhappy men that their death may tend toward the restoration of an honorable peace to China,-London Express.

The Higher Education. (From the Buston Globe.) The ery of the students at the University of

He's the feller! Who's the feller? Rockefeller! What a breadening effect a college education as upon the mind.